



United States
Environmental Protection
Agency

Site Update

San Jacinto River Waste Pits Superfund Site

Harris County, Texas

December 2015

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Current Status

The U.S. Environmental Protection Agency (EPA) in cooperation with state, county, and local agencies is continuing to assess current and future site concerns to develop a comprehensive plan for site cleanup.

Due to the complexity of the San Jacinto River Waste Pits Superfund Site (the Site), the EPA decided that additional information was needed prior to recommending a cleanup alternative. The U.S. Army Corps of Engineers (USACE) is performing an independent review of remedial alternatives, site modelling, and potential river/weather conditions that might influence remedy selection (among other things). The USACE issued a draft report in August 2015. The EPA has accepted comments on the USACE draft report and has directed the USACE to address these issues in a final report.

The EPA is also directing and overseeing additional evaluations of sediment, cap pore water, groundwater, and surface water. These activities are anticipated to be initiated in December/January and completed by July 2016. On-site activities will include sampler installation, directional drilling of groundwater monitoring wells, and collection of subsurface sediment and surface water samples.

After these investigations and the Feasibility Study are completed, the EPA will announce a proposed remedial

Water Quality

A total of 13 monitoring wells were installed and groundwater samples collected from across the Site

alternative in a Proposed Plan that will be available for public comment. The EPA will also host a public meeting during the comment period to allow public participation in the remedy selection process.

The EPA anticipates that the Proposed Plan will be released for public comment in late 2016. The EPA will continue to communicate with site stakeholders and the community on progress at the Site.

Site Background

The Site is on the western bank of the San Jacinto River, in Harris County, Texas, located north and south of the Interstate Highway 10 (I-10) bridge over the San Jacinto River. The Site was placed on the National Priorities List (NPL) in March 2008. The EPA is currently evaluating remedial alternatives to address contamination at the Site.

Site Contaminants

Soil, sediment, and fish tissue sampled during site investigations indicate that dioxins are the chemicals that need to be addressed. Other chemicals including arsenic and polychlorinated biphenyls (PCBs) are also present, but do not contribute to a significant amount of risk compared to the dioxins.

A temporary armored cap installed over the waste pits in 2011 isolated the dioxin in the pits. The cap prevents dioxin releases to the river as well as direct exposure to persons in the area. Fish and shellfish in the river, however, still contain dioxin (as well as pesticides and PCBs) from various sources, and are covered by a fish consumption advisory issued by the Texas Department of State Health Services.

About Dioxin

Dioxins are produced from a variety of natural and man-made processes. The dioxin found in the Site impoundments originated from the Champion International Paper Mill. Dioxins adhere to the materials in the impoundments and are virtually insoluble in water. from 2011 to 2013. The results of the groundwater sampling indicate that dioxins have not migrated to the deeper Chicot aquifer, which is a drinking water source.

Deleted: The EPA is planning to perform an underwater dive inspection and side-scan sonar survey of the existing cap in December 2015 to evaluate its long-term structural stability.¶

Because dioxins are virtually insoluble, they do not move readily in the groundwater system. Groundwater is neither a transport pathway nor an exposure pathway at the Site.

Sampling in the cap pore water and surface water just above the cap in 2012 did not detect any tetra-dioxin, and showed that the cap is effective in preventing dioxin releases to surface water (TEQ below 0.01 pg/L). As noted above, additional sediment, groundwater, cap pore water, and surface water sampling will be conducted under the direction and oversight of the EPA.

Residential Soil Sampling

In 2011 and 2012, soil samples were collected from yards near the river banks in two residential areas: an area to the west of the Site (between Meadowbrook and River Road); and a second area along the eastern shoreline of the San Jacinto River to the northeast of the impoundments.

The results of the residential soil sampling program show that dioxins in the soil of residential areas near the Site are no different than background concentrations (for example soil in public parks of Houston) and are below levels considered protective by the EPA for residential soils. As noted above, dioxins originate from a variety of sources.

Containment in Capped Areas

The wastes in the impoundments are effectively contained by the temporary armored cap installed in 2011. Sampling indicates that the wastes are not leaking, and visual inspections as well as elevation surveys show that the cap is intact and stable. The armored cap includes three layers of protective geotextile and geomembrane covered by rock, and was designed and constructed in accordance with the EPA and USACE design guidance to withstand major storms, including those that would only occur once every 100 years.

The cap continues to be routinely monitored and maintained. In July 2012, a relatively minor storm (much less than the 100-year design storm) event occurred and resulted in a loss of armor material in some areas, but did not expose the underlying waste material. The cap was repaired following the storm, and was later upgraded in January 2014 to address deficiencies identified by the USACE by reducing the slope and increasing armor material size in some localized areas.

The EPA performed an underwater inspection of the

armored cap on December 9th and 10th, 2015 and identified a small area on the northwestern part of the cap that requires placement of additional cap material. The respondents are working with EPA to complete these maintenance activities.

The various remedial alternatives that the EPA is evaluating include methods of treating or removing the waste and affected sediment, or enhancing the effectiveness and reliability of the cap.

Community Engagement

In 2012, the EPA awarded a Technical Assistance Grant (TAG) to the Galveston Bay Foundation. Galveston Bay serves as a lead agency to interpret site information and data for the community with the assistance of a Technical Advisor.

The San Jacinto Community Awareness Committee (CAC), comprised of the EPA, State, and Harris County agencies, also coordinates efforts to review and respond to site community engagement and public issues impacted by the Site. State Agencies have also worked closely with the community to provide information and canvass neighborhoods.

For more information:

If you would like more information about the Site, visit our website or contact the following resources:

<http://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0606611>

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To receive a Spanish translation of this fact sheet call the EPA at 1.800.533.3508 (toll-free).

Para recibir una traducción en español de esta hoja de datos, comuníquese con la Agencia de Protección del Medio Ambiente de los EEUU (la EPA) al número de teléfono 1.800.533.3508 (llamada gratis).

All inquiries from the news media should be directed to the Region 6 Press Office at 214.665.2200.

